

野火_EBF6ULL S1 Pro 底板

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Title

野火_EBF6ULL S1 Pro 底板

Size
A4

Document Number

目录

Rev
V1.0

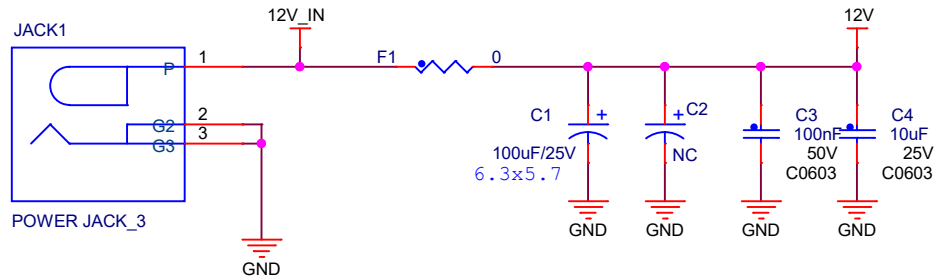
Date: Tuesday, May 18, 2021

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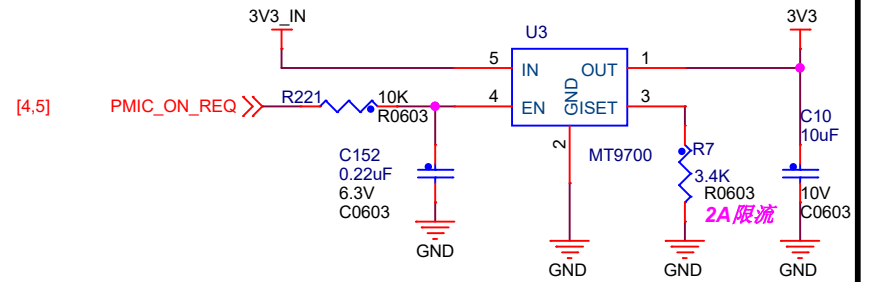
历史版本

版本号	日期	设计	描述
V0.1	2019-06-20	ZWC	初始版本，开发阶段
V1.0	2019-08-15	ZWC	整理对外发布，稳定版
V1.1	2020-02-24	ZWC	1.MINI USB接口改为TYPE C接口 2.WIFI的SD CLK通过跳帽选通，解决SD卡的兼容性问题 3.触摸按键增加触摸IC 4.修改电源开关

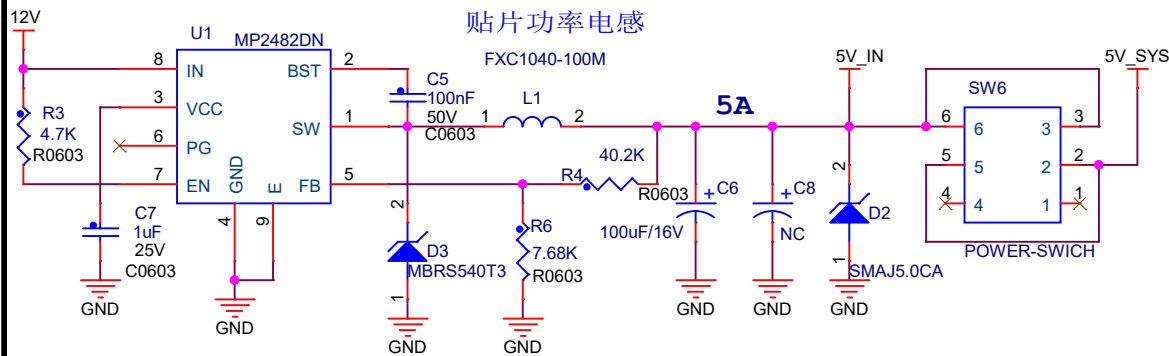
DC IN : 12V



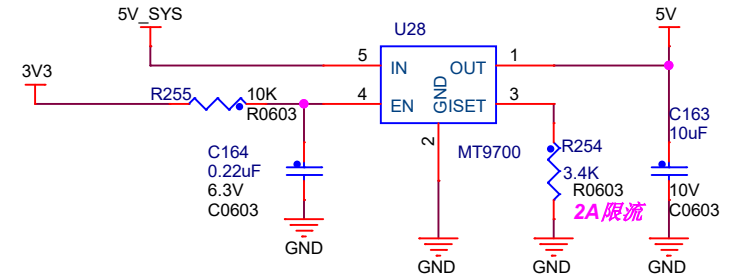
3.3V 输出控制及过流保护



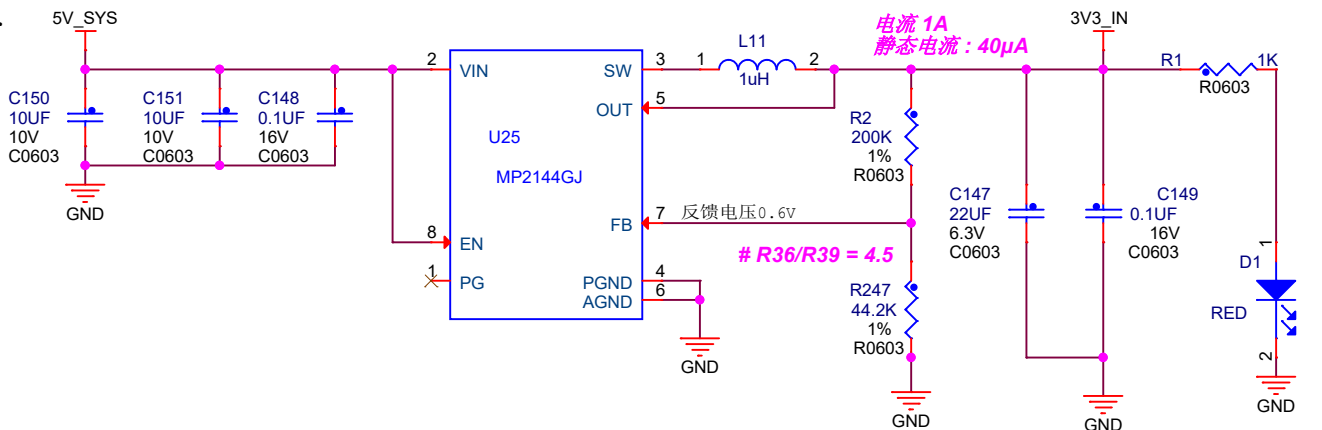
DC/DC 5V



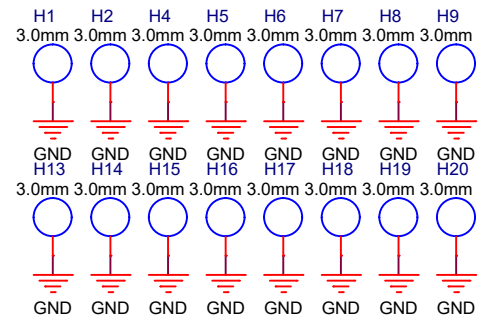
5V输出控制及过流保护



5V转3.3V



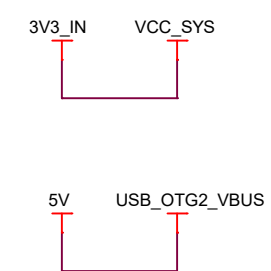
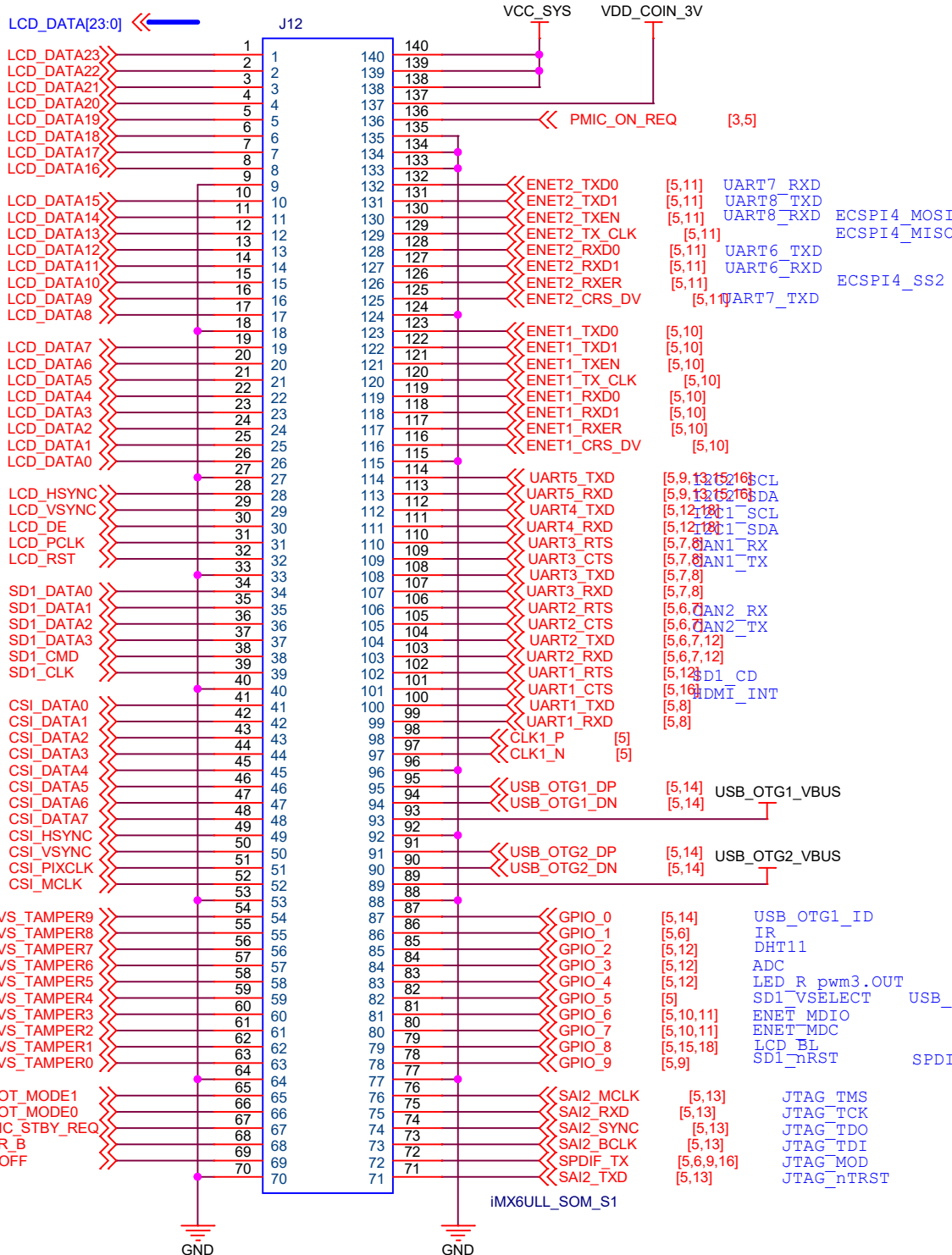
定位孔



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	电源	
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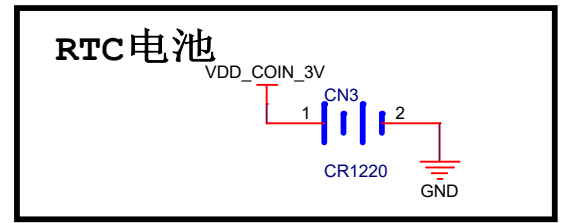
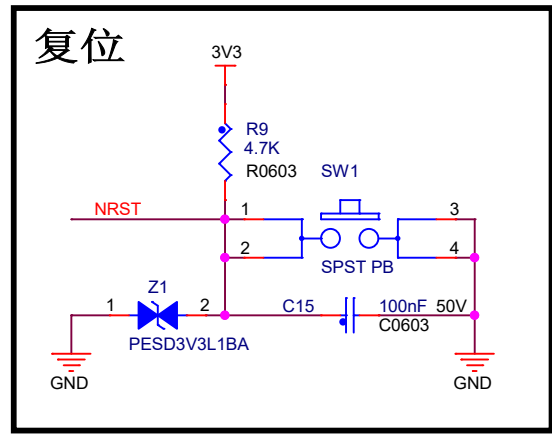
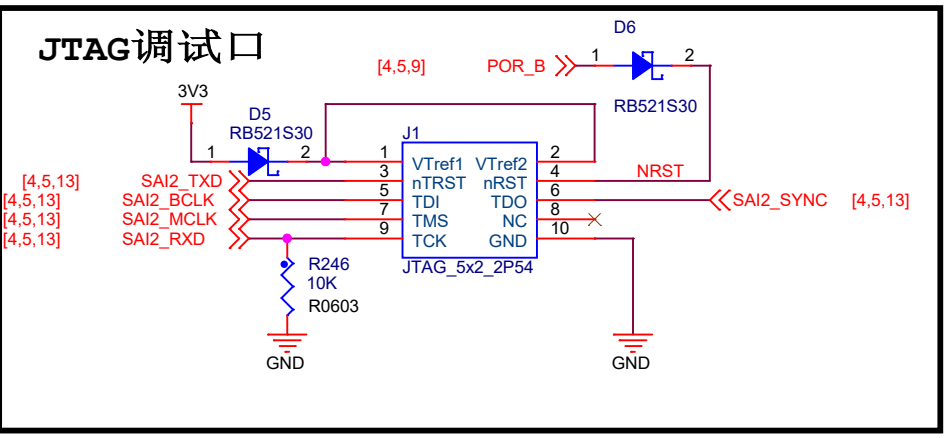
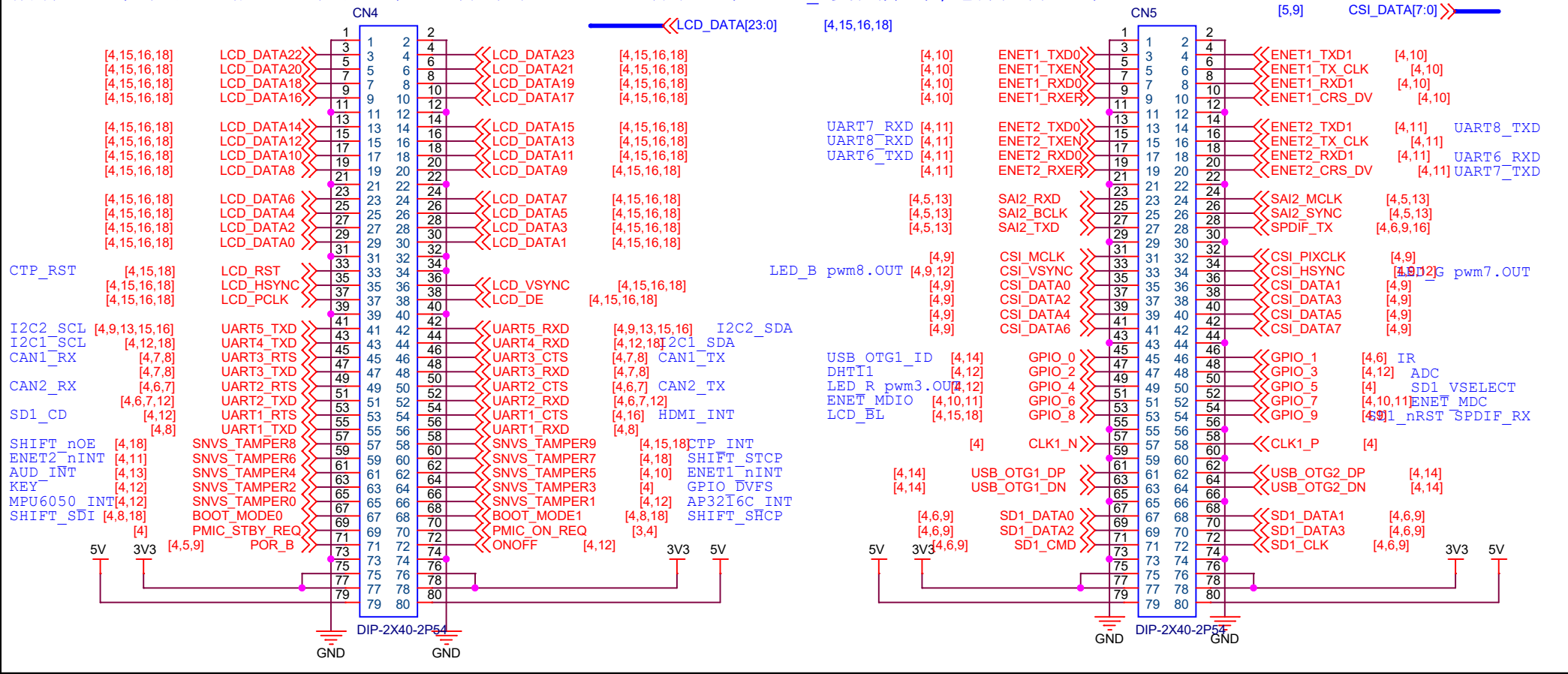
邮票孔核心板 [5,15,16,18]



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引出IO口(排针)

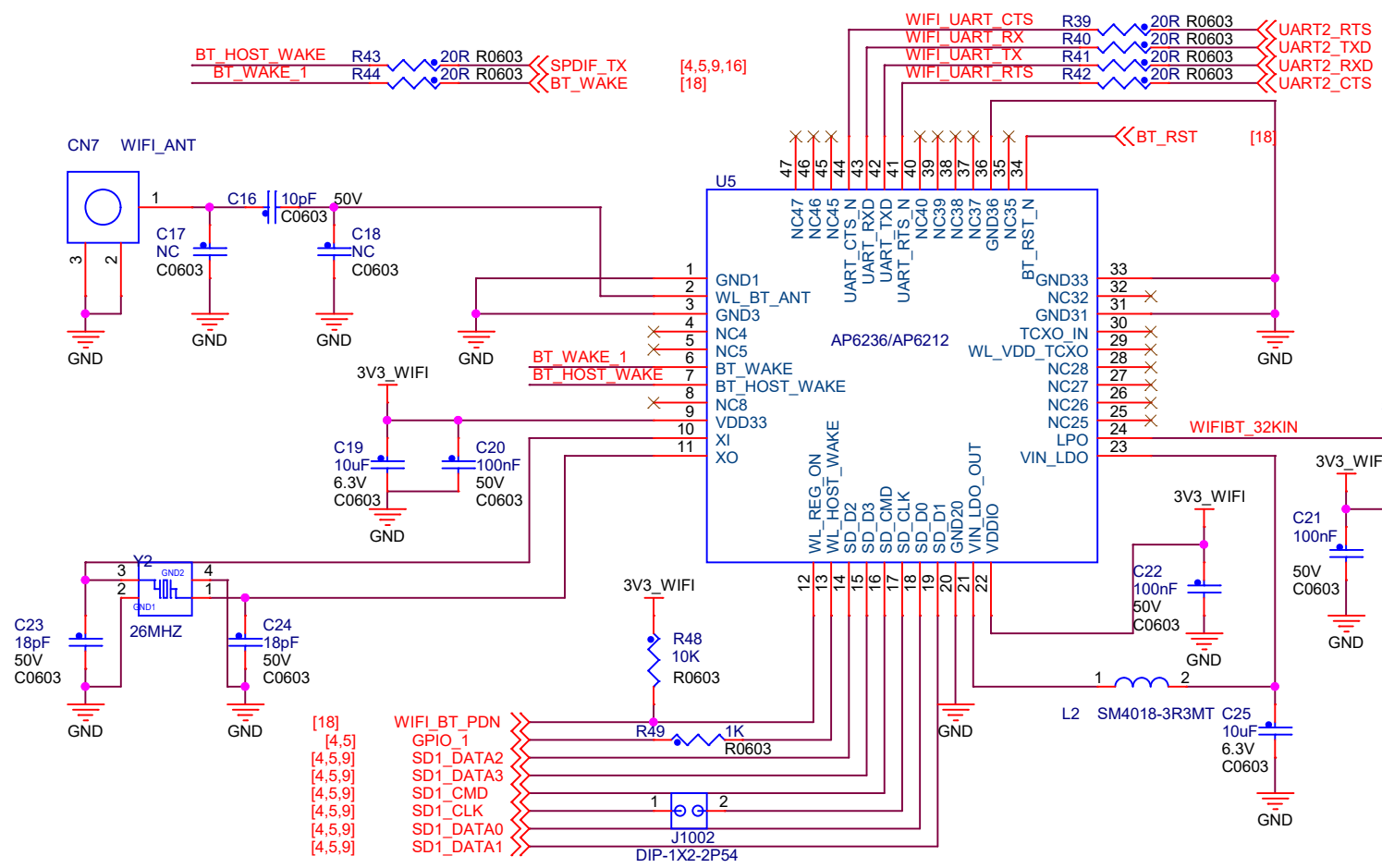
所有IO全部引出, 包括GPIO引出107个, 差分时钟一组, USB专用口2个, POR_B复位脚1个, 电源控制口2个



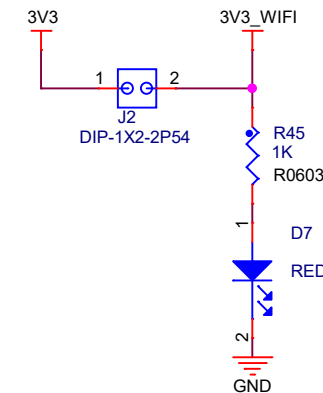
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Title: 野火_EBF6ULL S1 Pro 底板		
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WIFI&Bluetooth

与SD卡共用SDIO接口，因此WIFI跟SD卡不能同时使用



WIFI电源指示灯



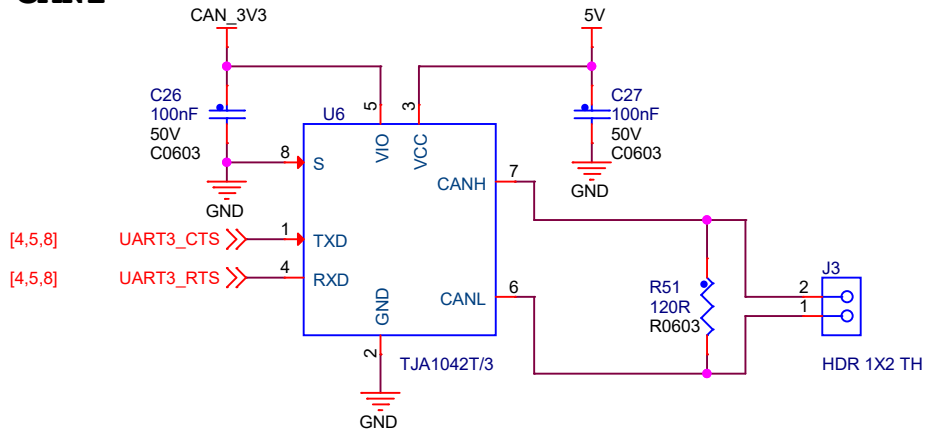
确保输入WIFI模块的正弦波幅度低于1.9V

有源晶振

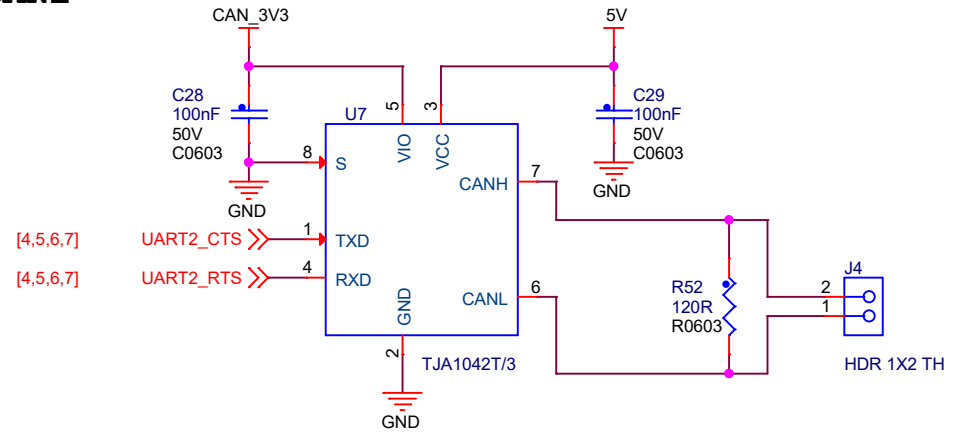
使用SD卡的时候断开这个跳帽
使用WIFI的时候接上这个跳帽
解决SD卡兼容性的问题

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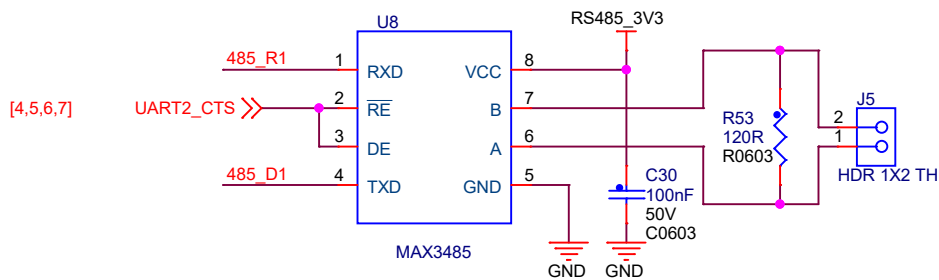
CAN1



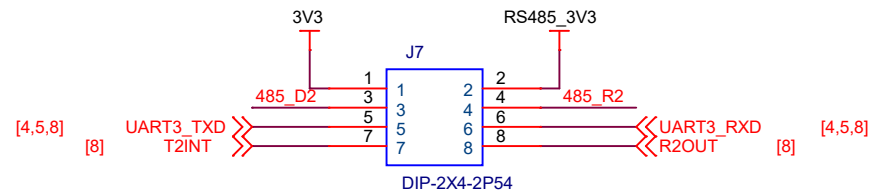
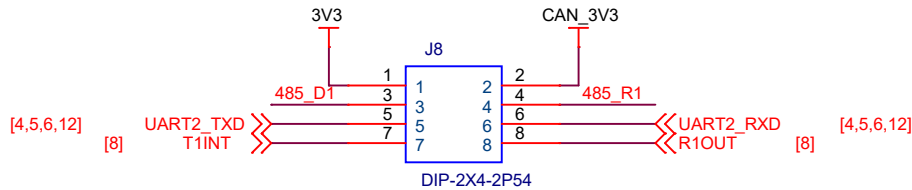
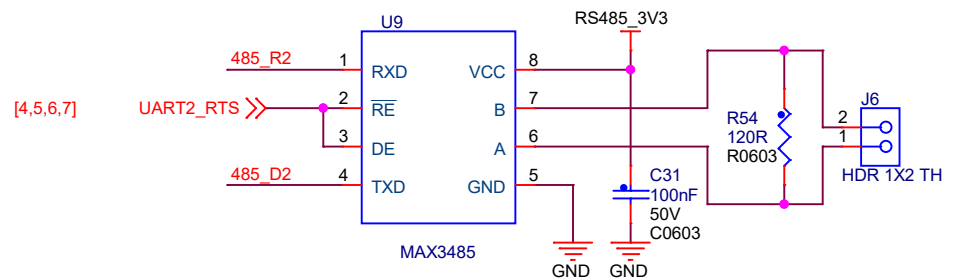
CAN2



RS485-1



RS485-2



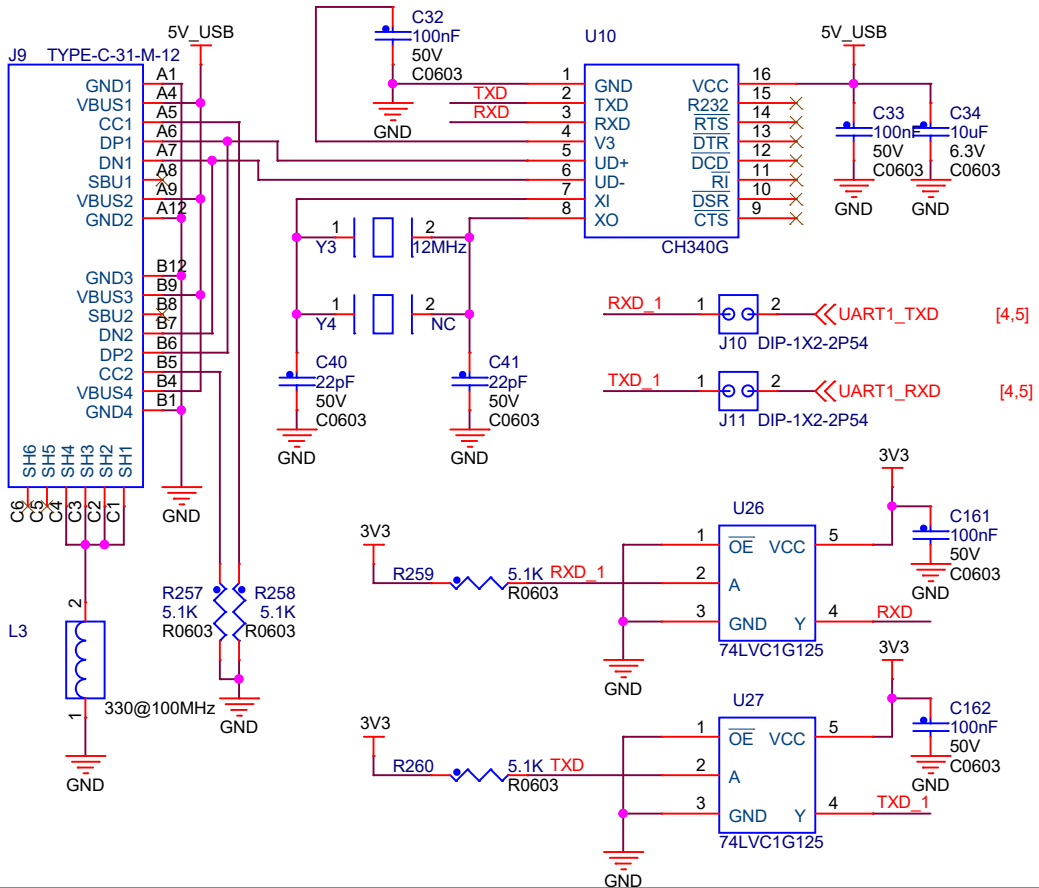
RS485-1和RS485-2的电源
由跳帽J7的1和2脚控制，默认不接

CAN1和CAN2的电源
由跳帽J8的1和2脚控制，默认不接

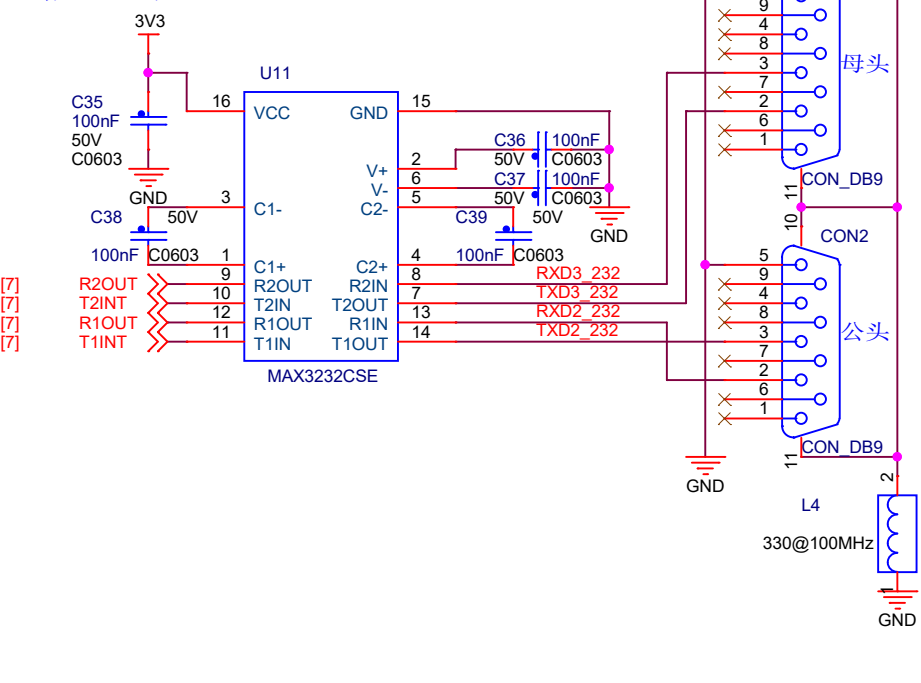
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USB转串口

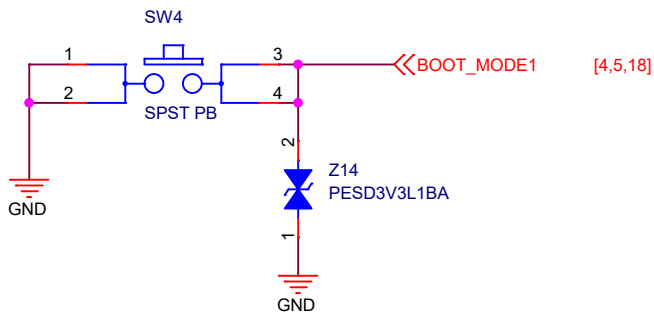


RS232串口



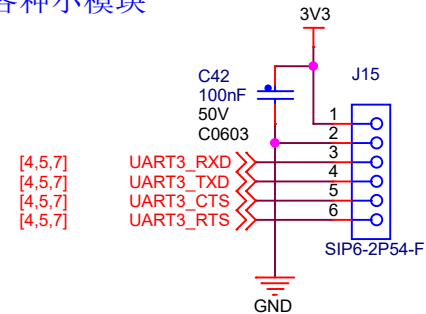
串行烧录启动切换

按下按键再复位即可进入串行烧录模式



EBF-Module

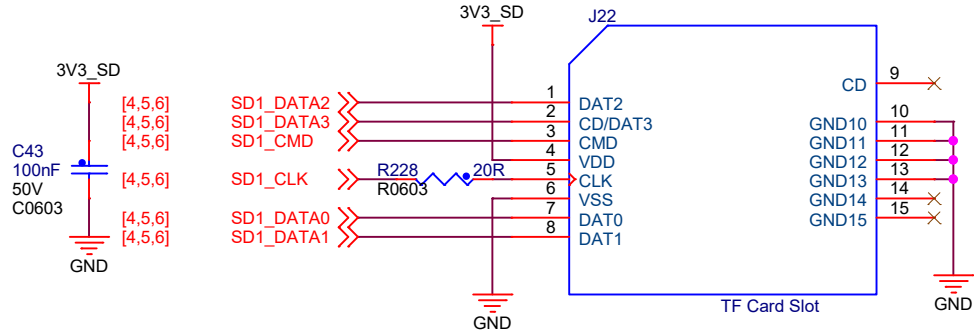
用于接野火的各种小模块



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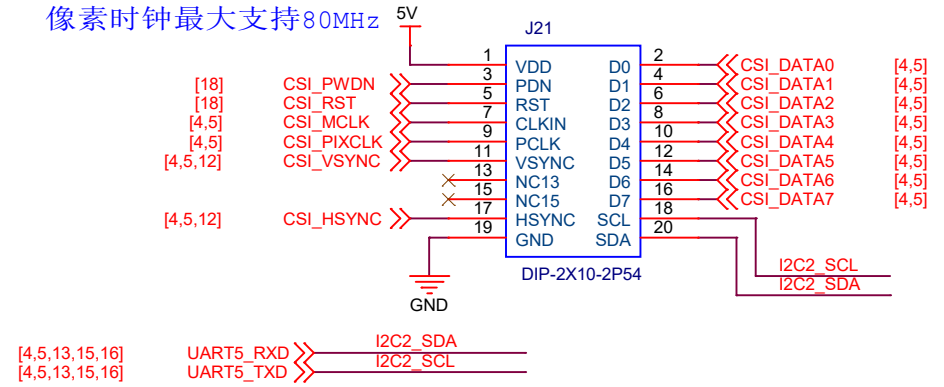
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SD卡 与WIFI复用SDIO引脚



摄像头接口

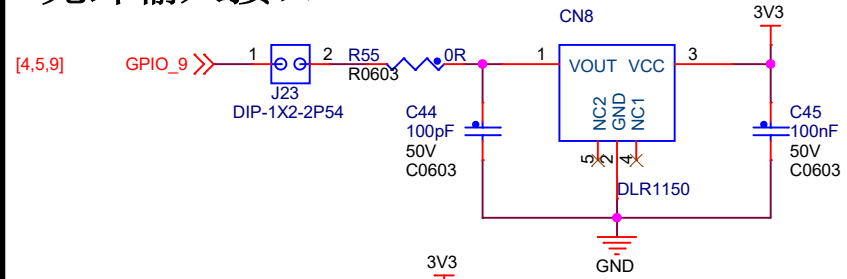
像素时钟最大支持80MHz



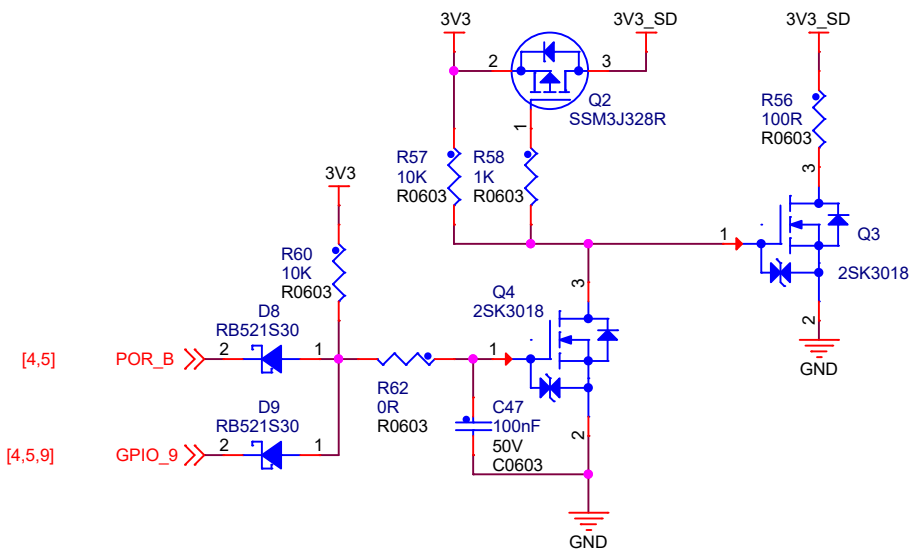
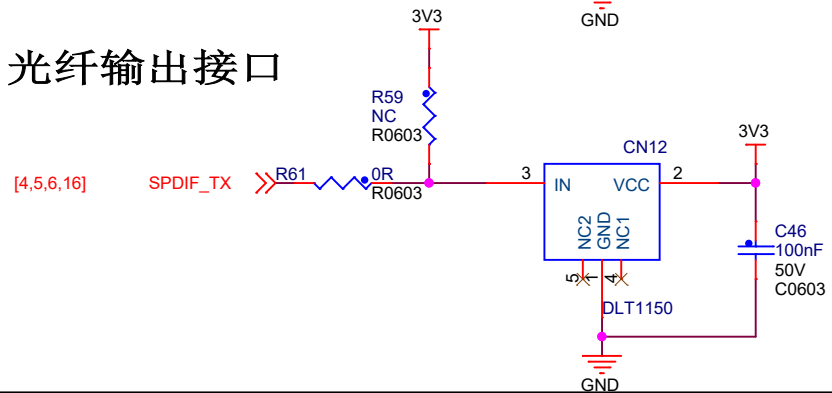
[4,5,13,15,16]
[4,5,13,15,16]

UART5_RXD >> I2C2_SDA
UART5_TXD >> I2C2_SCL

光纤输入接口



光纤输出接口



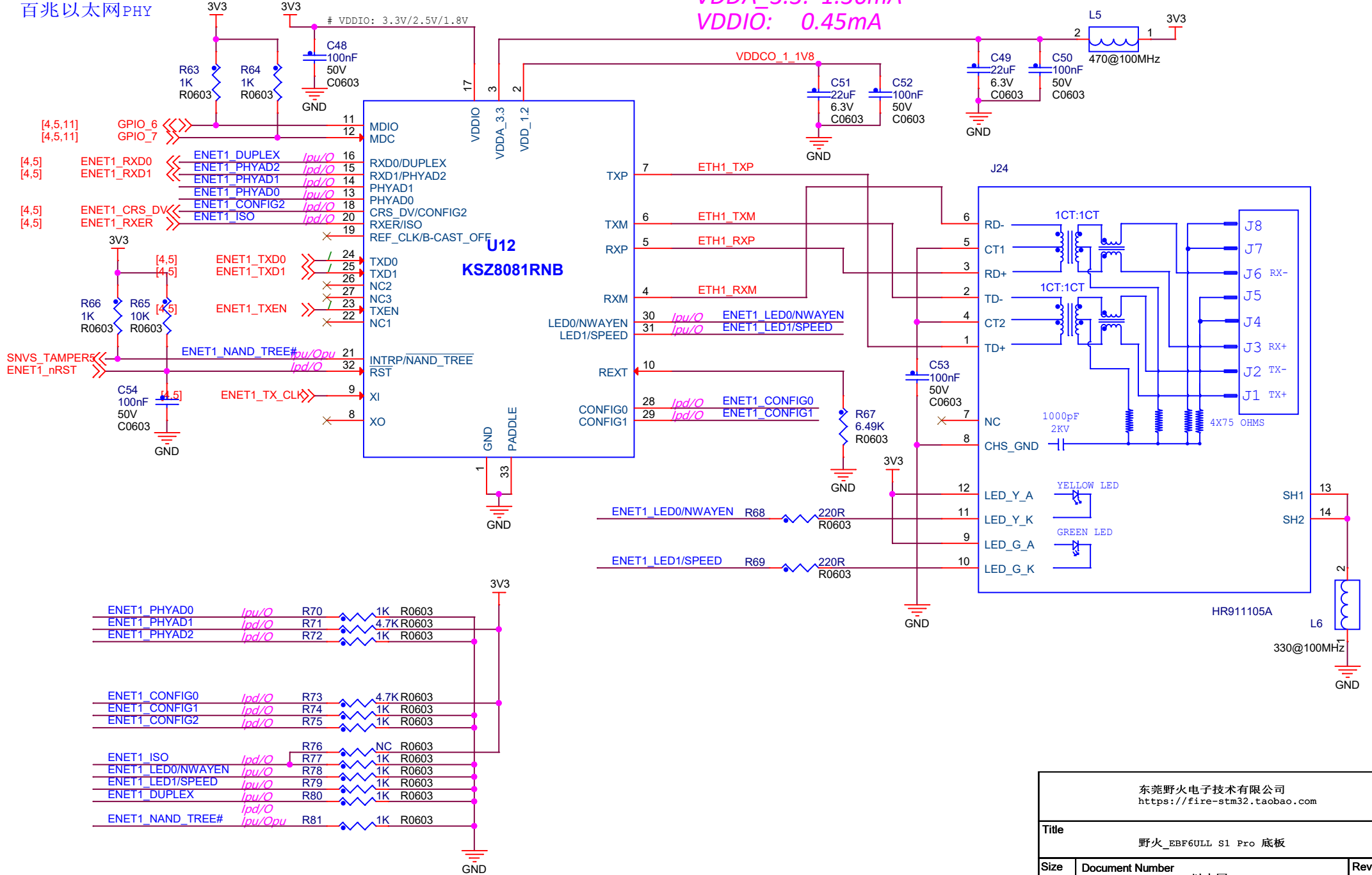
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以太网接口1

百兆以太网PHY

软件掉电模式:
VDDA_3.3: 1.36mA
VDDIO: 0.45mA

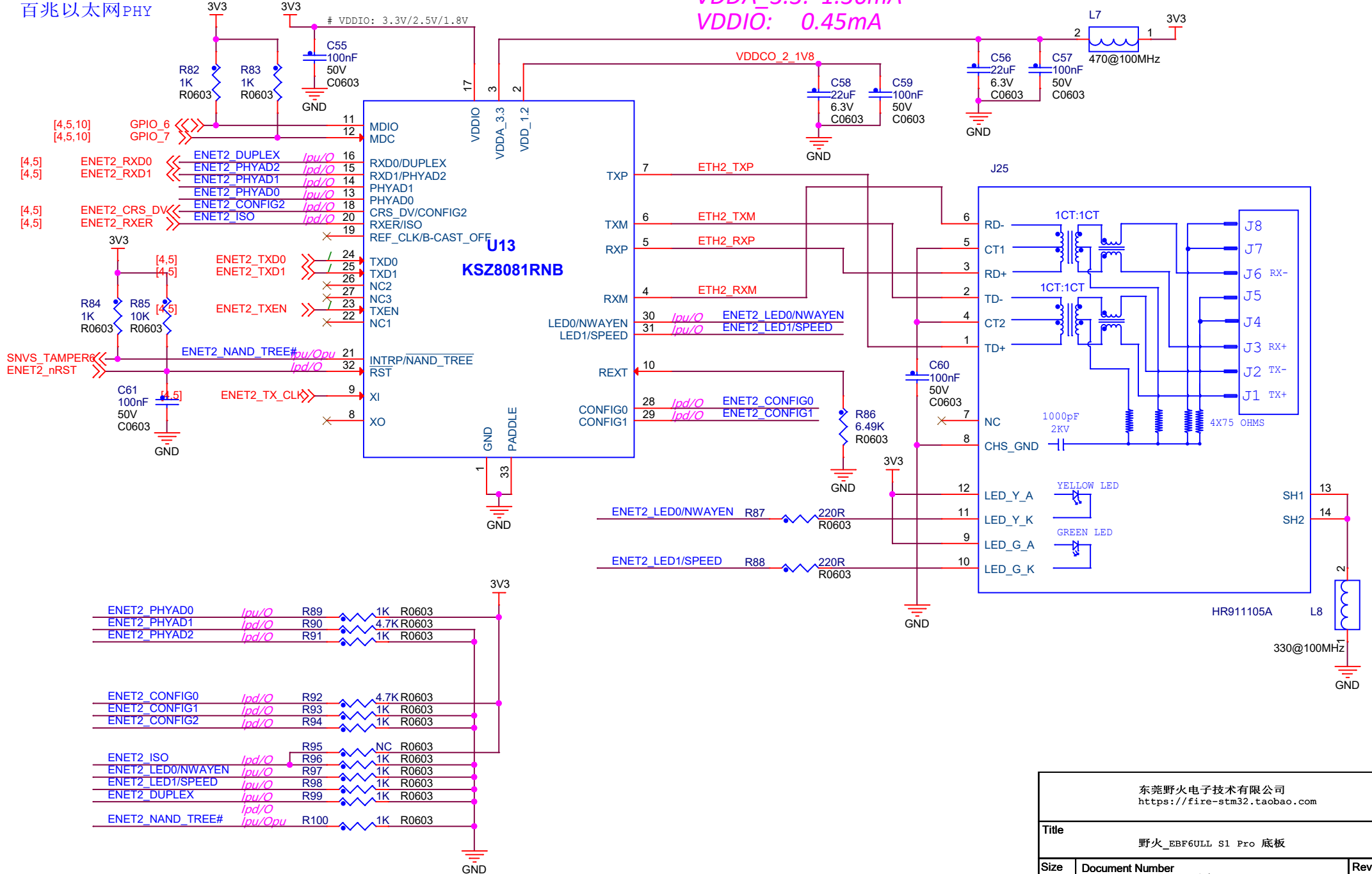


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以太网接口2

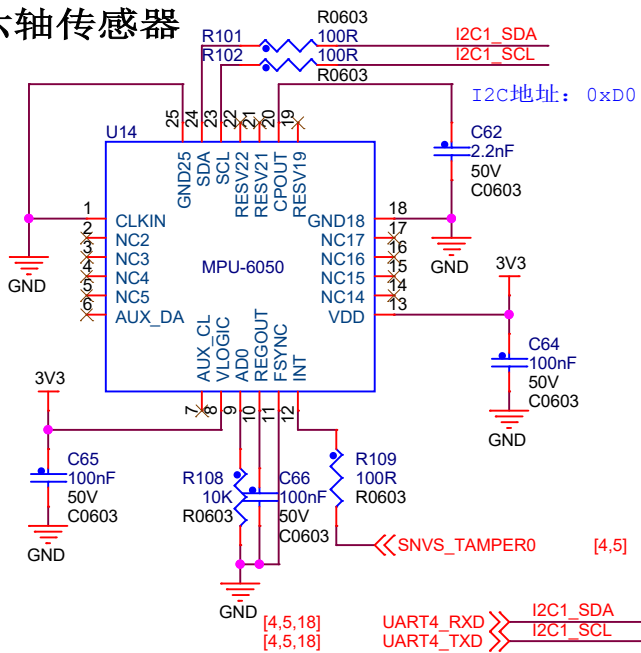
百兆以太网PHY

软件掉电模式:
 VDDA_3.3: 1.36mA
 VDDIO: 0.45mA

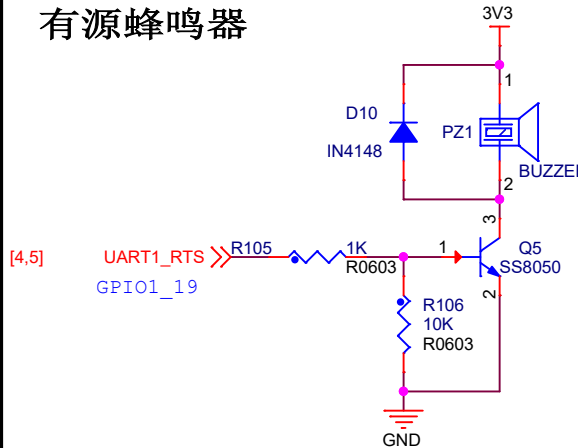


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六轴传感器

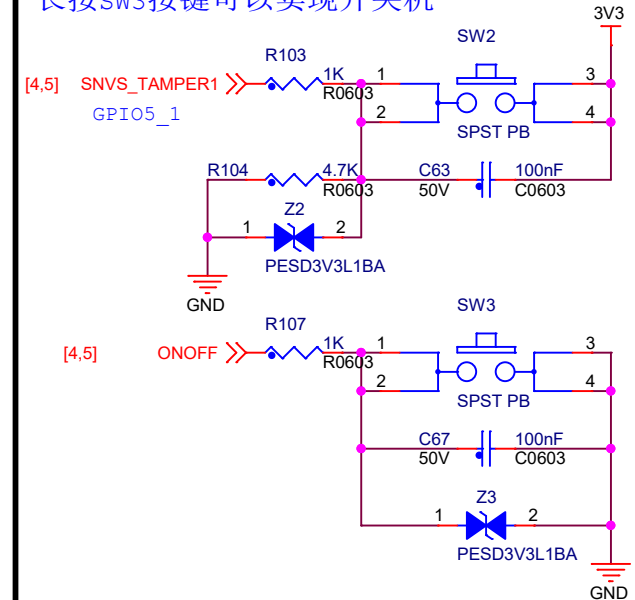


有源蜂鸣器

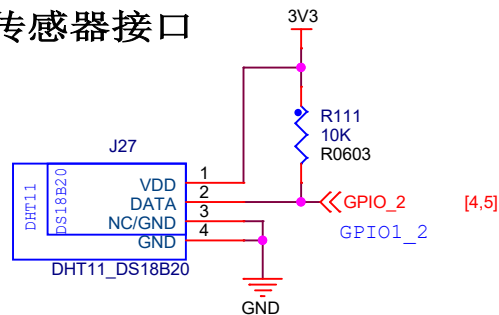


按键

长按SW3按键可以实现开关机

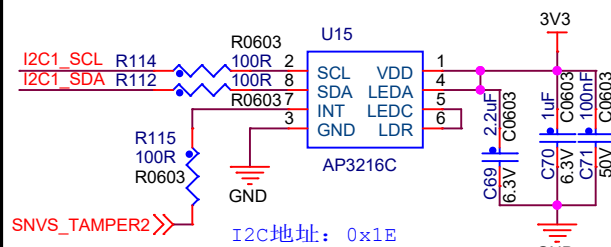


温湿度传感器接口

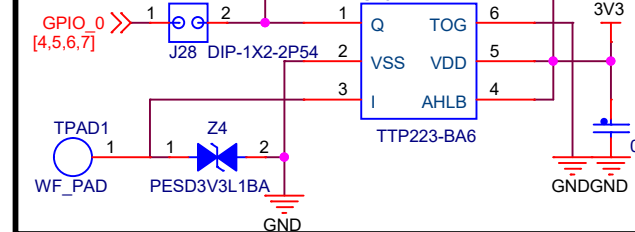


ALS+PS+IRLED (三合一)

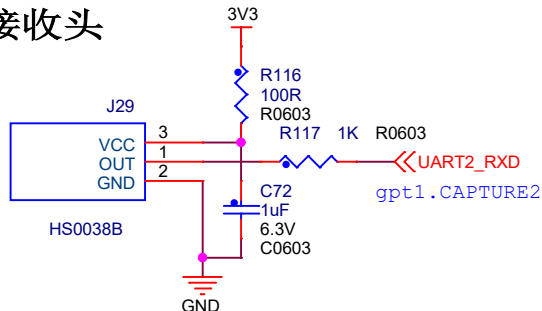
环境光传感器、接近传感器、红外LED三合一



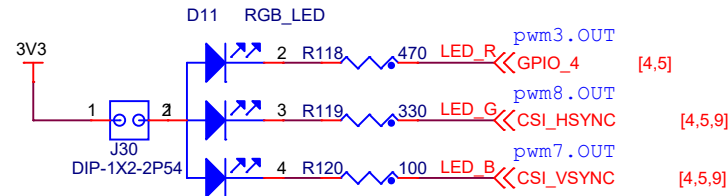
触摸按键



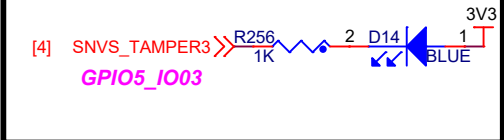
红外接收头



彩色LED



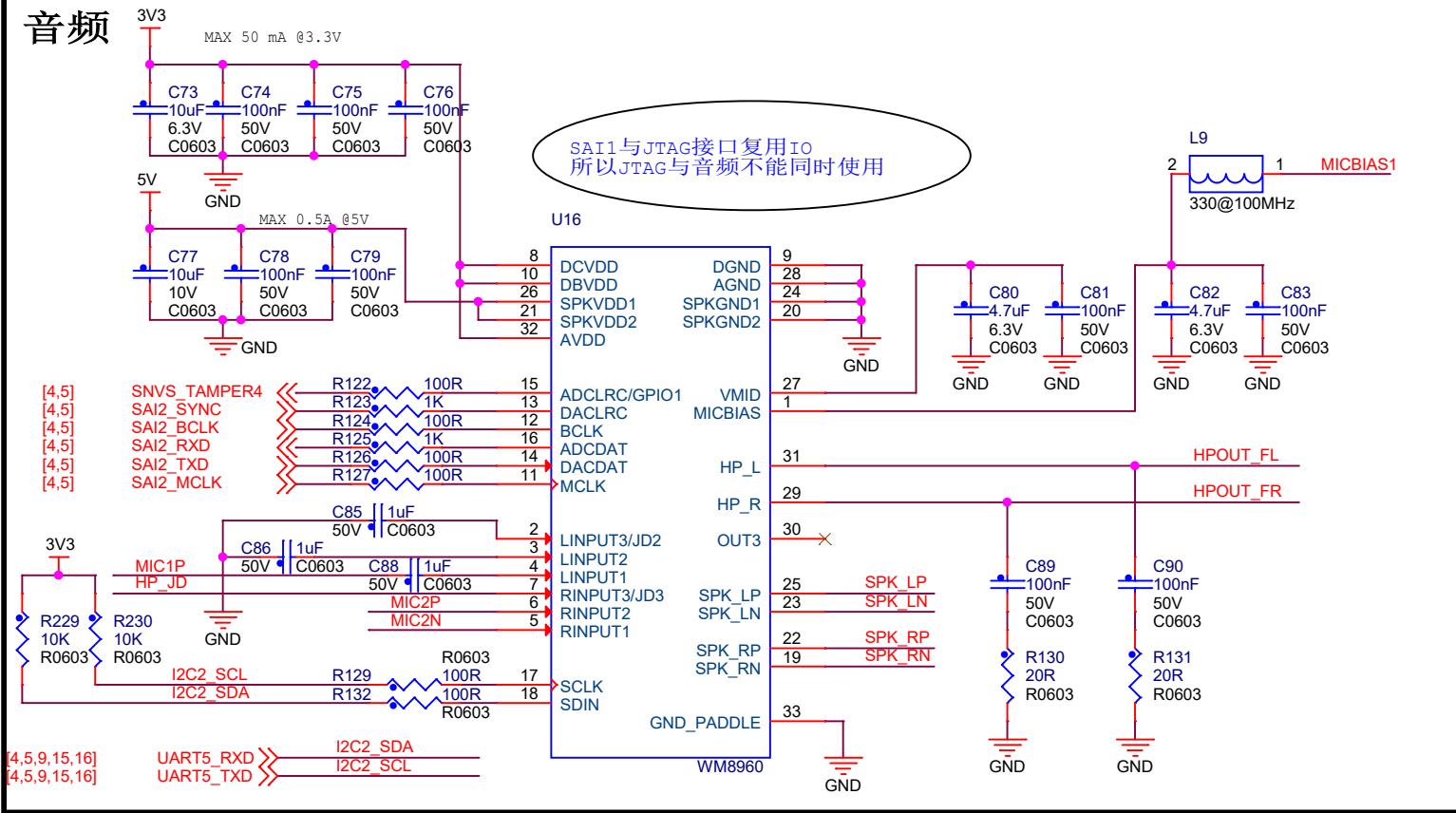
用户LED



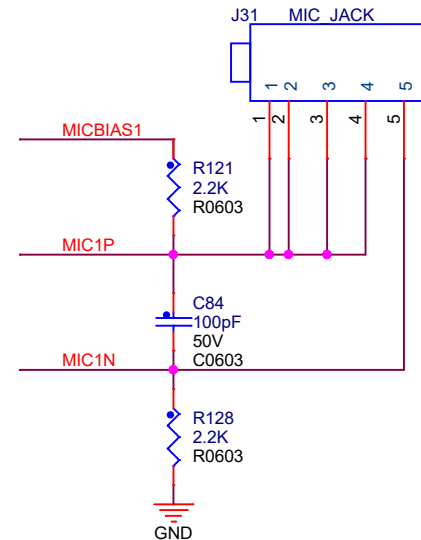
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传感器/按键/LED		
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音频

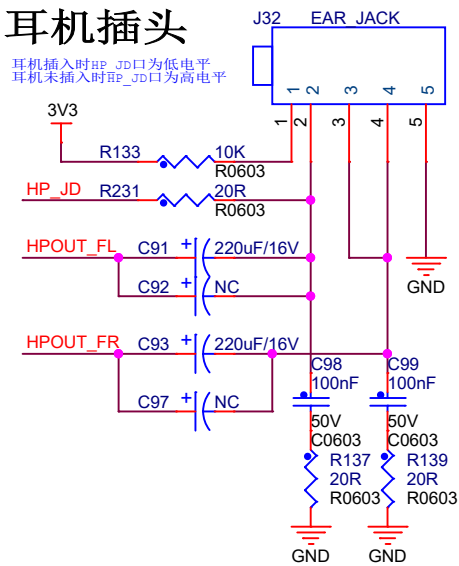


MIC插头

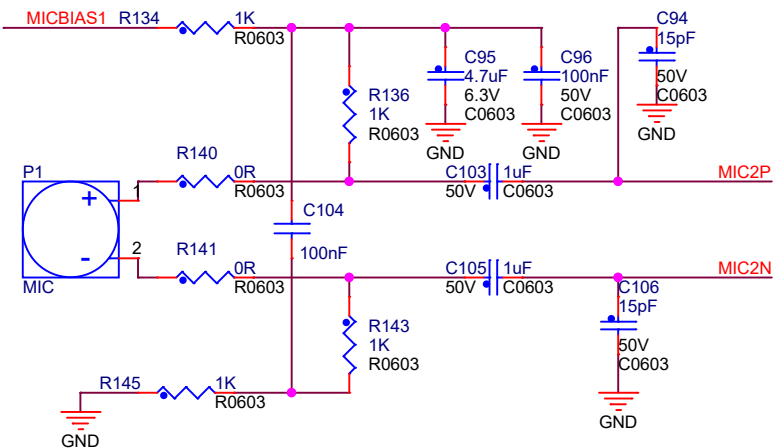


耳机插头

耳机插入时HP_JD口为低电平
耳机未插入时HP_JD口为高电平

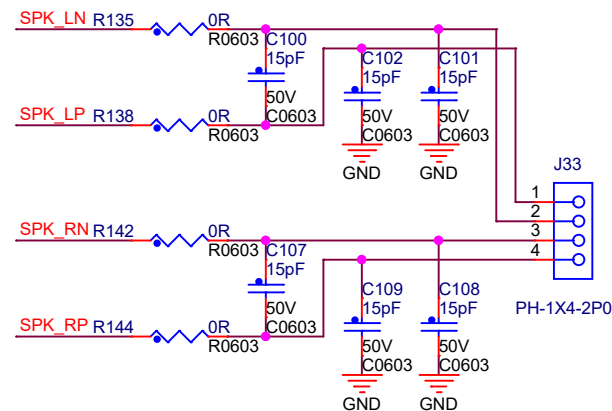


MIC



喇叭插座

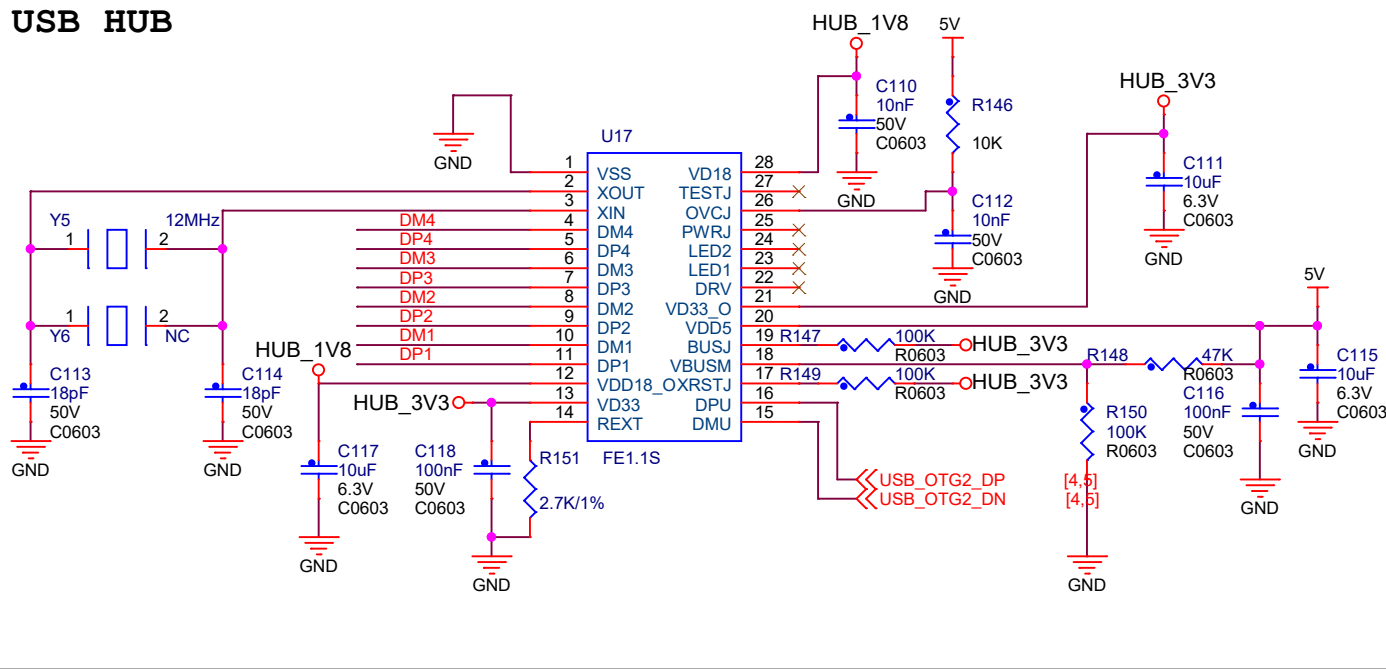
可以驱动2个8Ω 1W的喇叭 (BTL方式)



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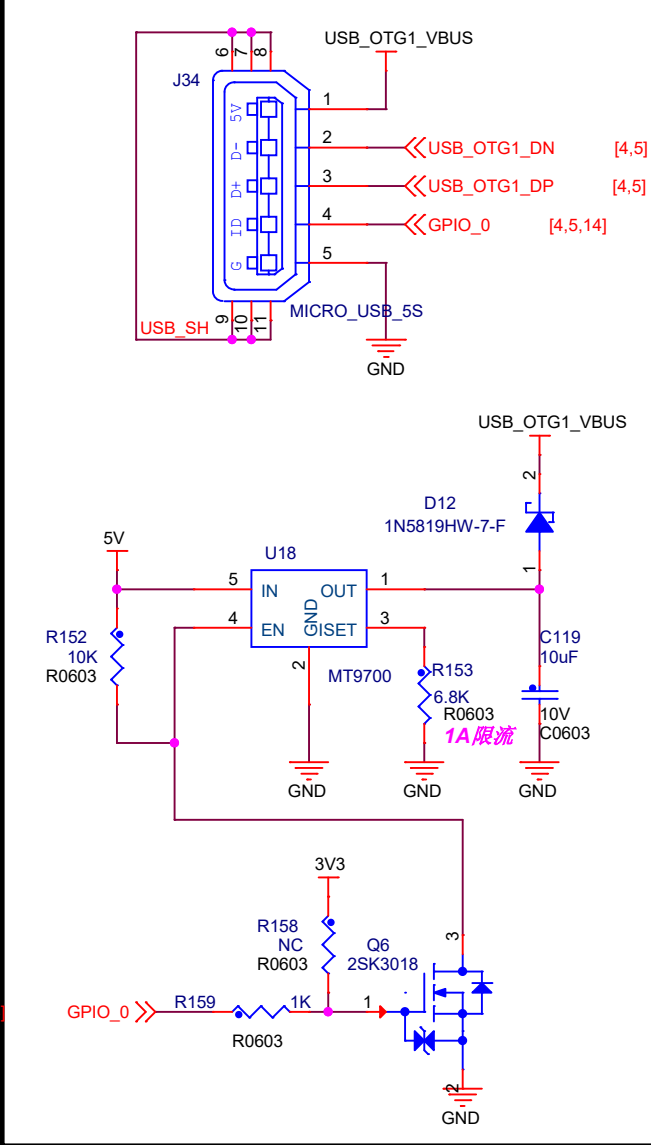
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USB HUB

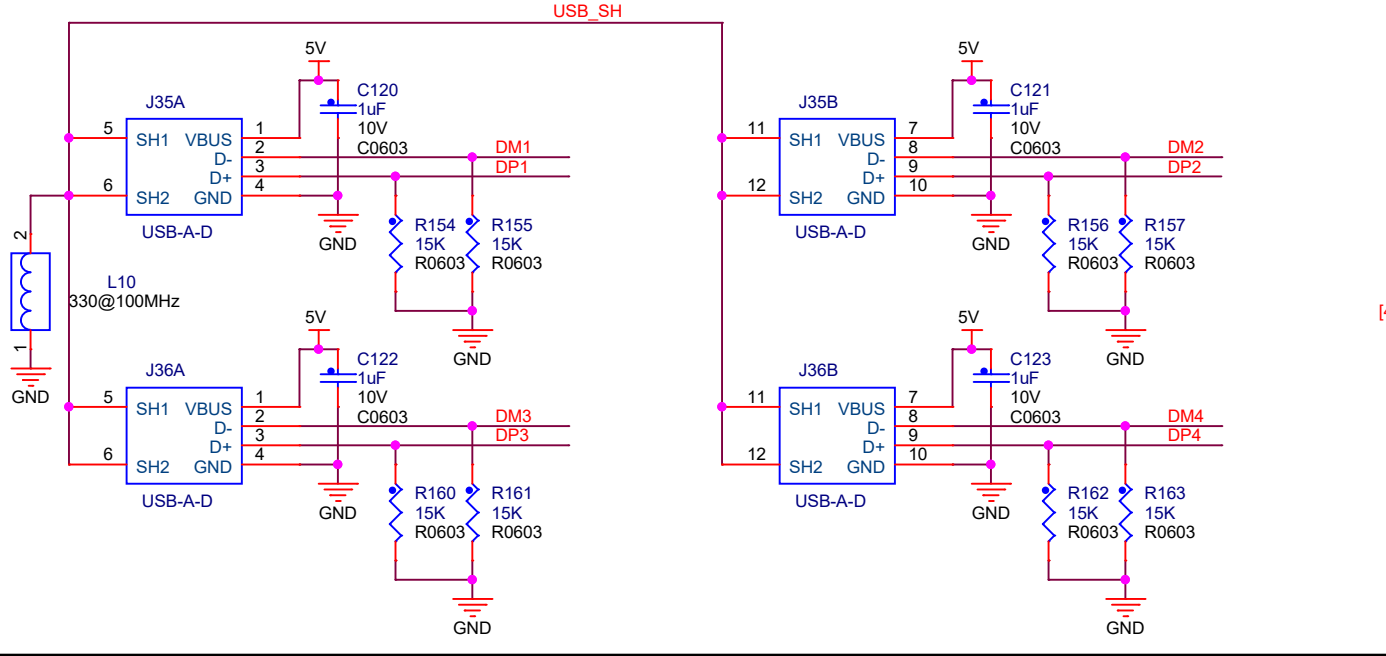


USB OTG

ID悬空时为Device设备，接地为HOST主机



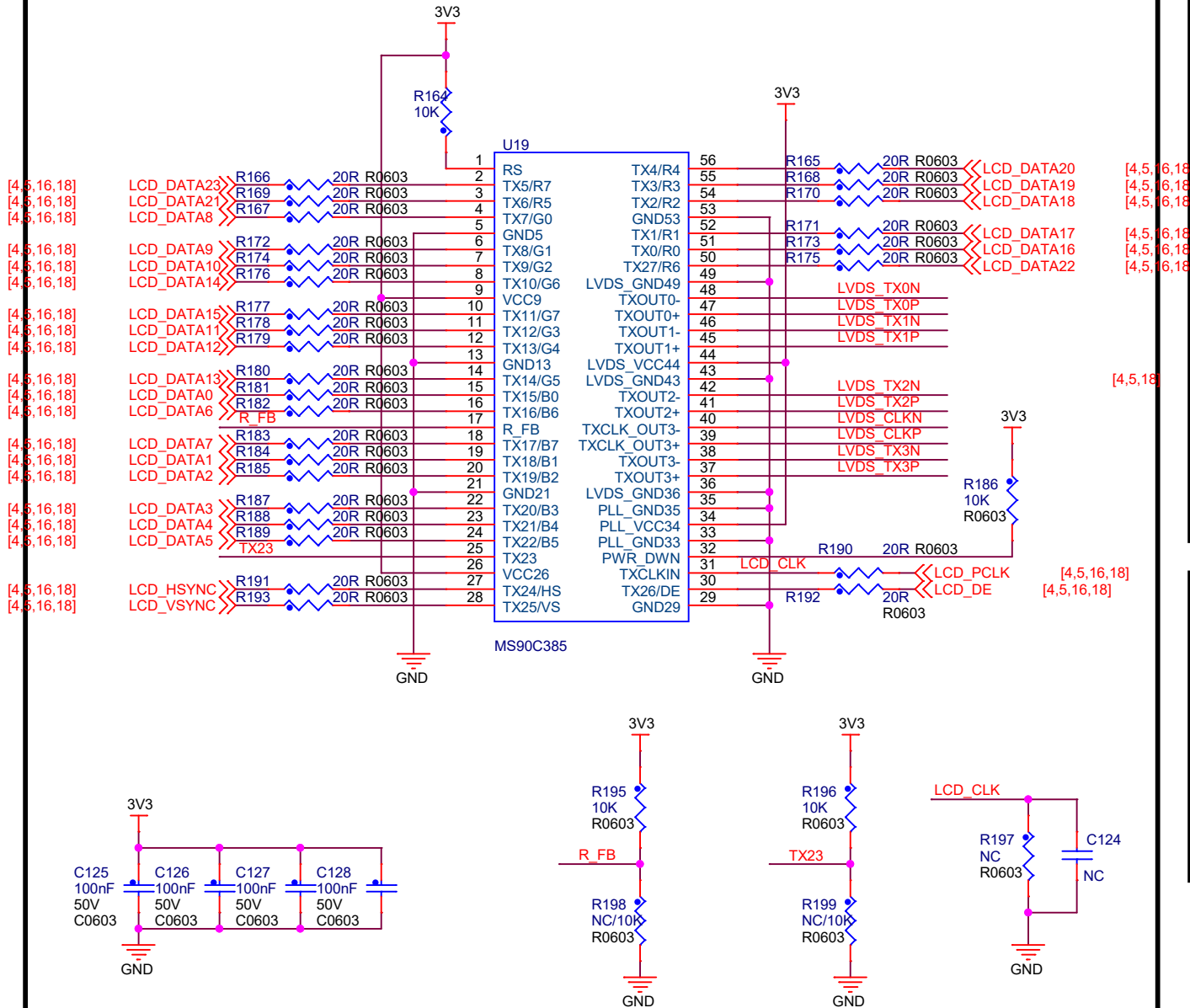
USB HOST



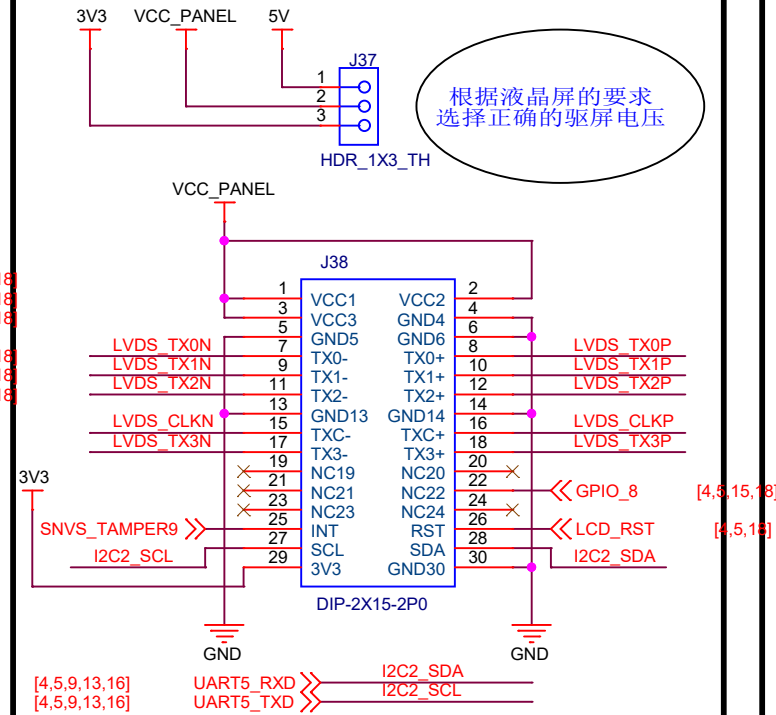
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RGB888转LVDS

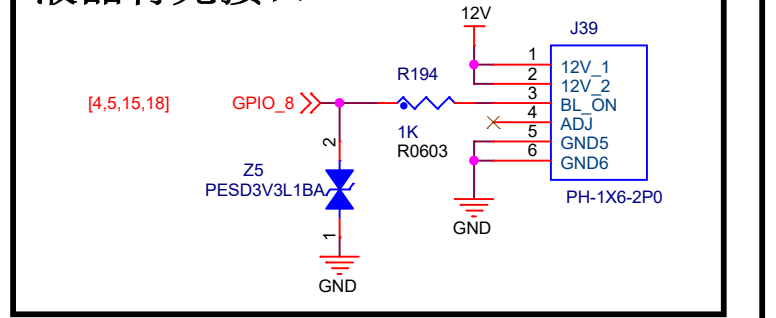
支持高达1366*768分辨率
支持单八位的LVDS接口的液晶屏



驱屏接口



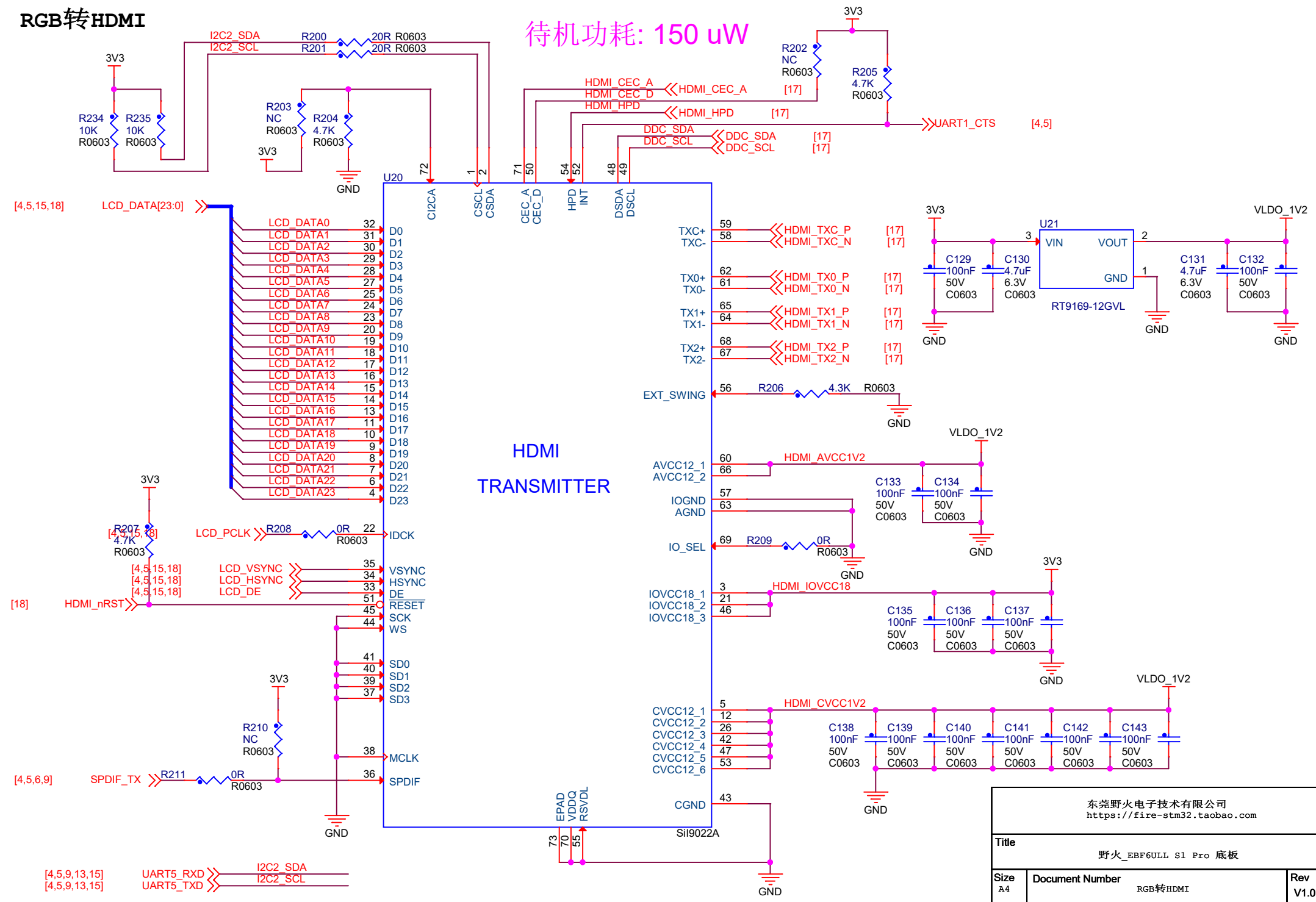
液晶背光接口



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RGB转HDMI

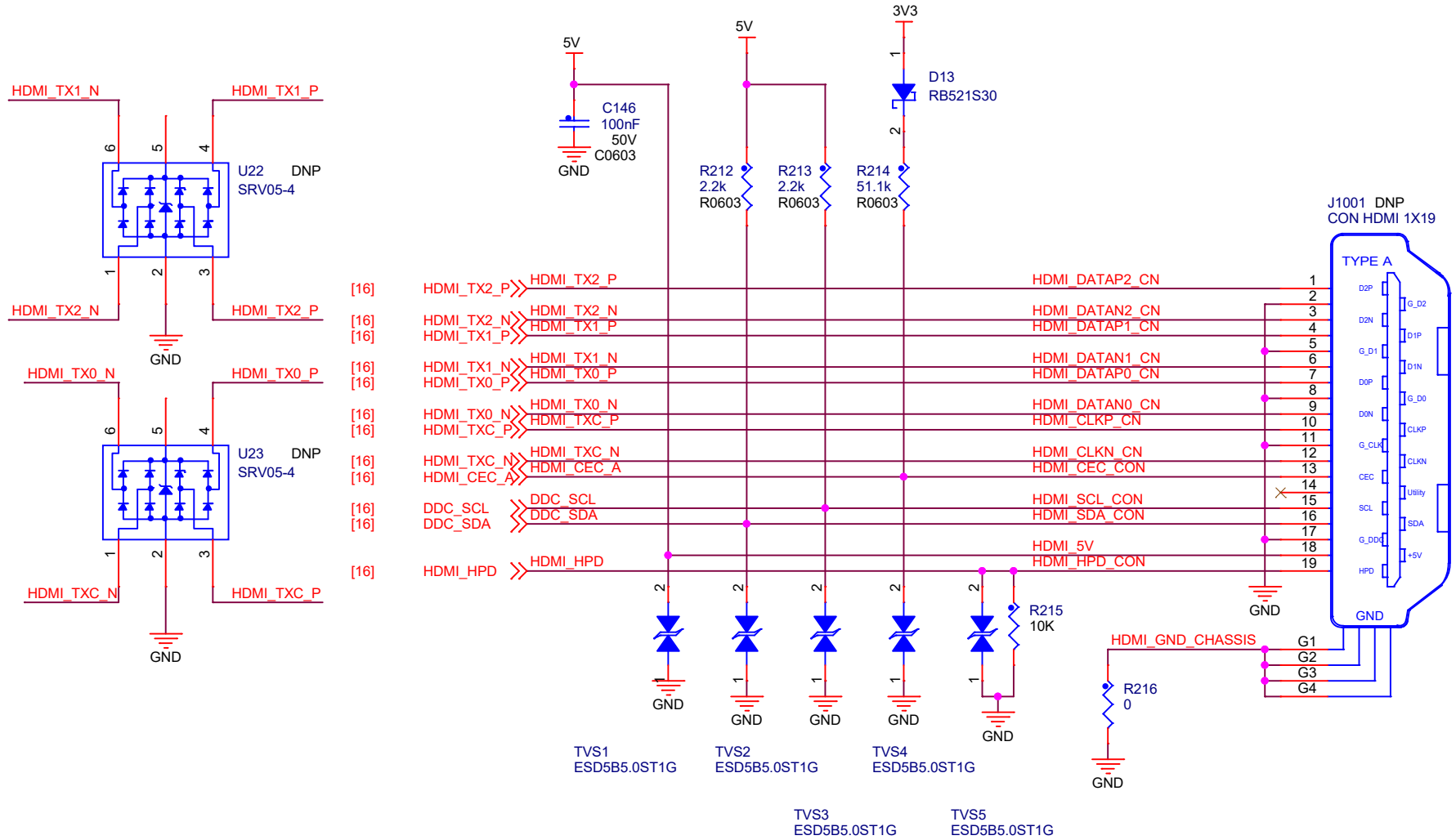
待机功耗: 150 uW



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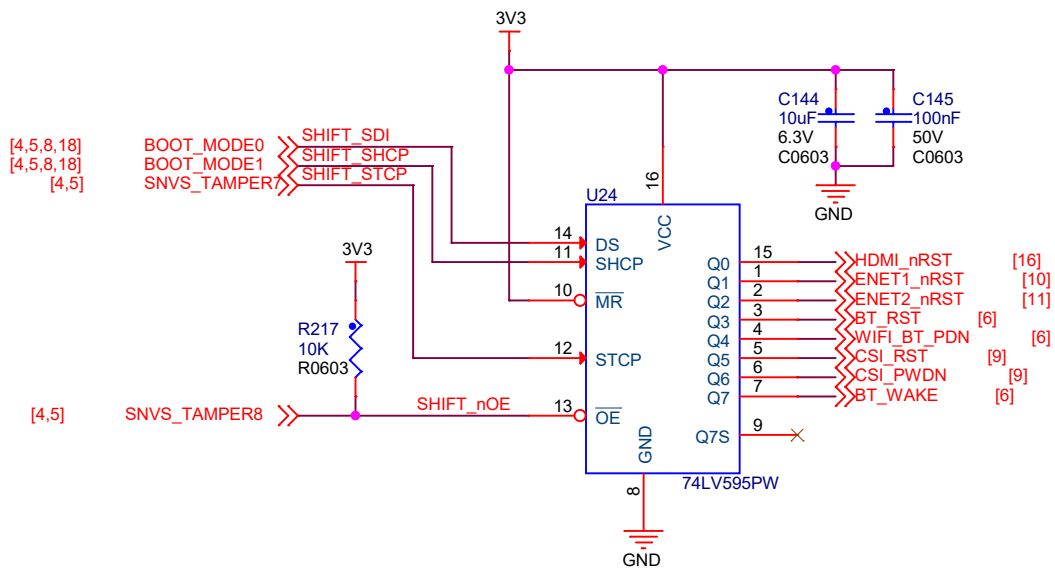
HDMI连接器

Type A型

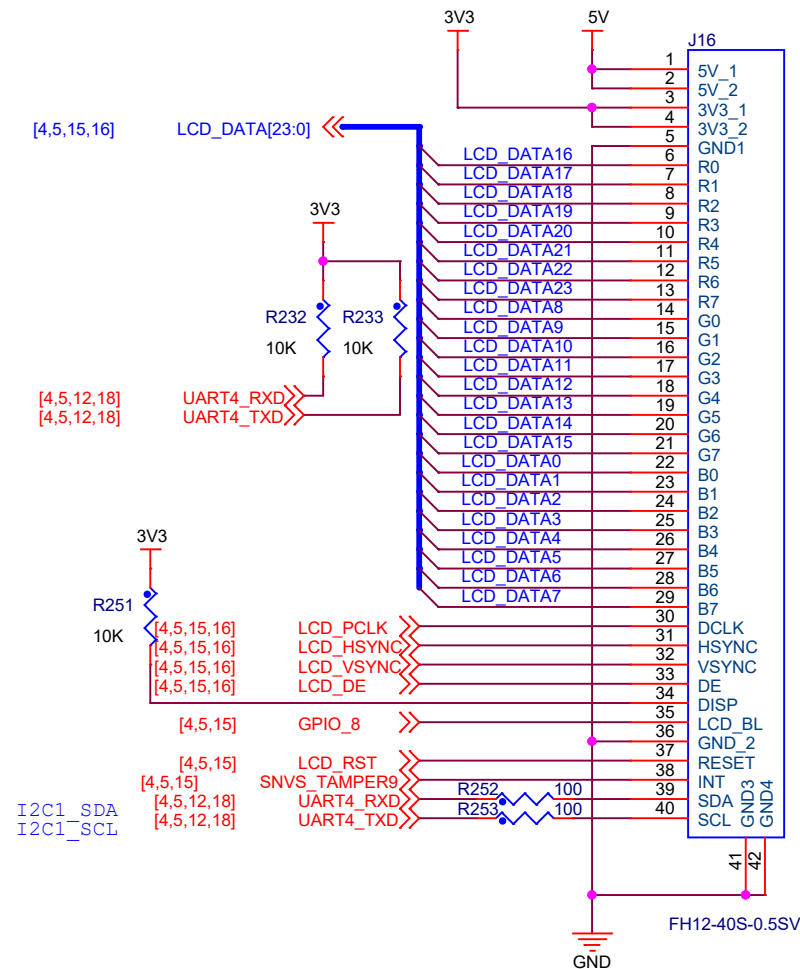


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扩展IO



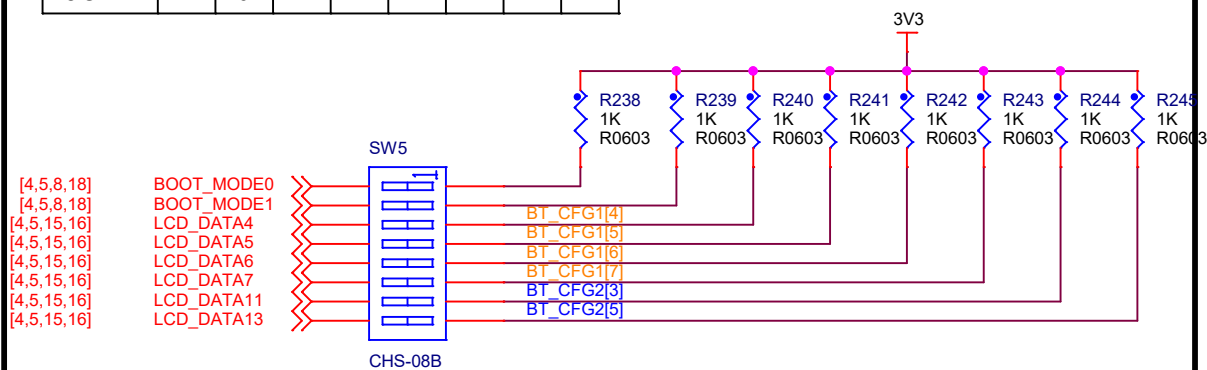
LCD-FPC接口



启动设置

拨码开关拨到ON位置为1，反之为0

SW5	1	2	3	4	5	6	7	8
NAND	0	1	1	0	0	1	0	0
EMMC	0	1	0	1	1	0	1	0
SD	0	1	0	0	1	0	0	1
USB	1	0	X	X	X	X	X	X



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